

Public Workshop and CEQA Scoping Meeting

Downtown Anchorage and
B Street/Broadway Piers (DAB)
TMDLs for Toxic Pollutants in Sediments

January 10, 2013

AGENDA

Thursday, January 10, 2013
9:30 am - 12:00 noon

1	Welcome, Introductions, Purpose of Meetings – Charles Cheng	5 min	9:30-9:35
	I. Public Workshop		
2	Overview of DAB TMDL Project - Charles Cheng <ul style="list-style-type: none"> Sediment contamination status Legal requirements Technical TMDL TMDL development approach Implementation Plan TMDL and Basin Plan Amendment Project history, status, goal, timeline 	20 min	9:35-9:55
3	DAB TMDL Development Effort by City of San Diego - Ruth Kolb	10 min	9:55-10:05
4	Public Comment/Close Public Workshop - All	40 min	10:05-10:45
	Break	10 min	10:45-10:55
	II. CEQA Scoping Meeting		
5	Overview of CEQA Scoping - Charles Cheng	20 min	10:55-11:15
6	Public Comments - All <ul style="list-style-type: none"> Alternatives to TMDL/BPA Methods the responsible parties would foreseeably use to comply with the TMDLs; Reasonably foreseeable significant environmental impacts associated with those means of compliance; Reasonable alternative means of compliance that would have less significant adverse environmental impacts; and Reasonable mitigation measures that would minimize any unavoidable significant adverse environmental impacts associated with the means of compliance. 	40 min	11:15-11:55
7	Closing Remarks - Charles Cheng	5 min	11:55-12:00
8	Adjourn		

Purpose of Workshop

- Introduce the project
- Describe key technical elements
- Discuss project goal and timeline
- Provide opportunity for public input

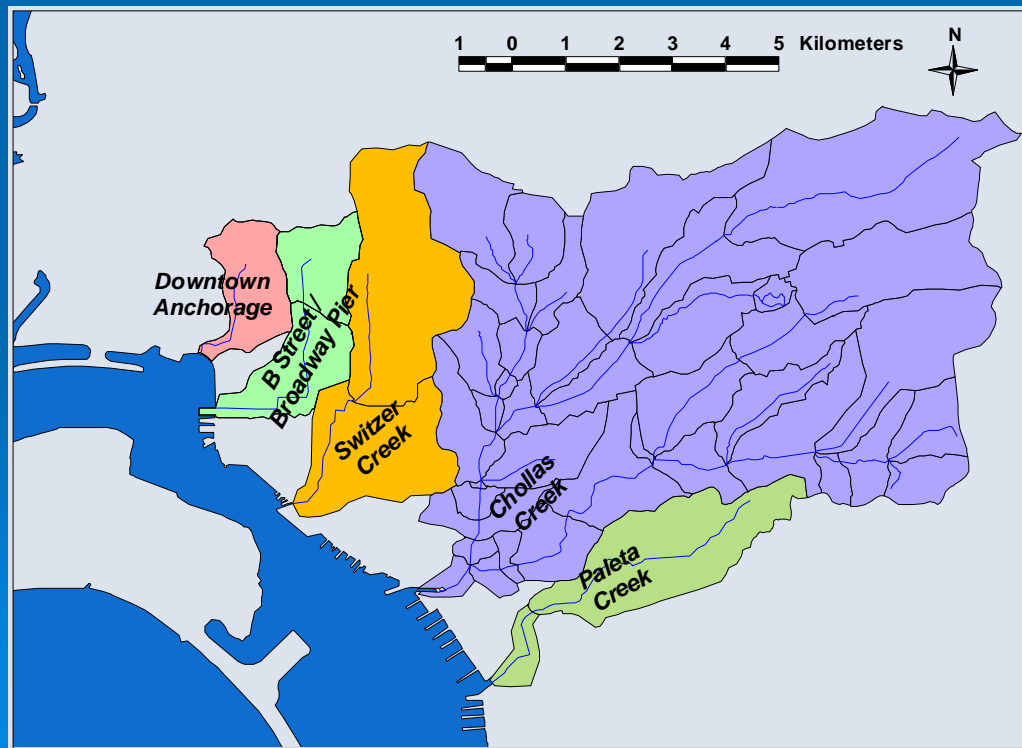
Purpose of CEQA Scoping Meeting

- Fulfill legal obligations
- Provide opportunity for agencies and public
 - to review the proposed project, identify environmental impacts, alternatives, and mitigations, and
 - to suggest actions early in the process

I. Public Workshop

Sediment Contamination Status

- Bay Protection Toxic Cleanup Program (90's): identified toxic sediment sites due to elevated chemistry, toxicity, and benthic community effects
- Phase I & Phase II Studies (04-05) by UCD, SCCWRP, SPAWAR: verified the impairments, identified cause of impairments (TIE)



Legal Requirements

- CWA 303(d)(1)(A): 303(d) Listing
 - Requires establish List of Impaired Waterbodies aka 303(d) List

- CWA 303(d)(1)(C): TMDL
 - Requires establish TMDL for each impaired waterbody/pollutant combination

CWA 303(d) List

Sites	Sediment Toxicity	Benthic Community Effects	Chlordane	PAHs	Total Coliform
Paleta Creek Mouth (7th Street Channel)	✓	✓			
Chollas Creek Mouth	✓	✓			
Switzer Creek Mouth			✓	✓	
San Diego Bay Shoreline, Downtown Anchorage	✓	✓			
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers	✓	✓			✓

Purpose of TMDL

- Restore an impaired waterbody
- Attain WQS
 - Meeting WQO
 - Protecting BUs

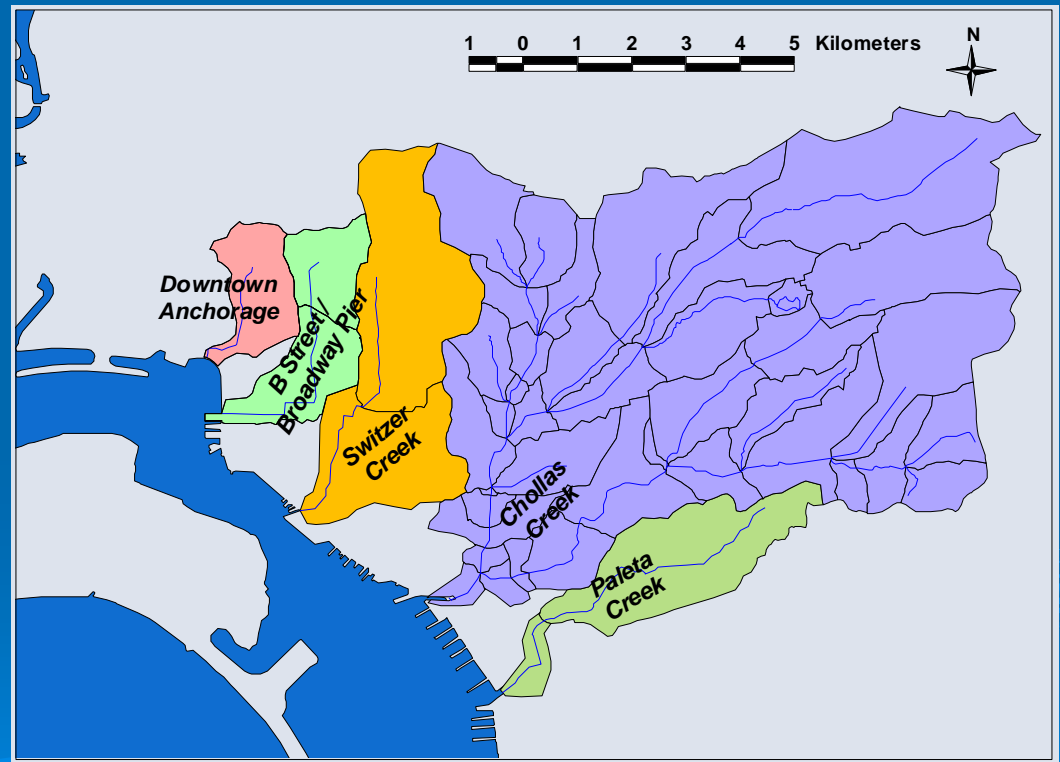
Two-Part Strategy for Restoration of Sediment Impairment in San Diego Bay

➤ Watershed -

Control the pollutant sources from entering the Bay

➤ Bay -

Remediate/cleanup of legacy pollutants in bay sediment



TMDL

- A TMDL is composed of two components:
 - Technical TMDL (calculation)
 - Implementation Plan

Technical TMDL

A TMDL is the maximum amount of the pollutant of concern that a waterbody can receive and still attain water quality standards.

$$\text{TMDL} = \Sigma \text{WLAs} + \Sigma \text{LAs} + \text{MOS}$$

WLAs - for point source discharges

LAs - for nonpoint source discharges and background

MOS - margin of safety

Elements of Technical TMDL

- Problem Statement
- Numeric Targets
- Source Analysis
- Linkage Analysis
- Margin of Safety (MOS)
- Seasonal Variation and Critical Conditions
- Allocation of the TMDL

Numeric Target

- Is a number that represents attainment of water quality standards
 - Meet water quality objectives
 - Protect beneficial uses
- Quantitative measure for meeting WQOs
 - Numeric WQOs, or
 - Interpretation of narrative (sediment) WQOs

Likely Cause of Impairment in Sediment

Sites	Chlordane	PAHs	PCBs	Zinc
Paleta Creek Mouth (7th Street Channel)	✓	✓	✓	
Chollas Creek Mouth	✓	✓	✓	
Switzer Creek Mouth	✓	✓	✓	
San Diego Bay Shoreline, Downtown Anchorage	✓	✓	✓	
San Diego Bay Shoreline, Vicinity of B St and Broadway Piers		✓	✓	✓

Development of Numeric Target for Sediment

- Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality (SWRCB 2009)
 - Multiple Lines of Evidence (MLOE) Approach
 - SQOs for Benthic Community Protection
- Used data collected in San Diego Bay
- Used 95% UCL of the mean of categories 1 (unimpacted) and 2 (likely unimpacted) for selecting numeric targets

Sediment Numeric Targets for CPS and DAB TMDLs

Contaminants of Concern in Sediment	Numeric Target (ug/kg)
Total PCBs	168
Total Chlordane	2.1
PPPAHs	2,965
Total Zinc	182

Development of Numeric Target for Human Health

➤ California Toxics Rule (CTR) for water column

Criteria for the Protection of Aquatic Life Human Health

Pollutant	Saltwater Acute (ug/l)	Saltwater Chronic (ug/l)	Organisms Only (ug/l)
PCBs	n/a	0.03	0.00017
Chlordane	0.09	0.004	0.00059
Benzo(a)Pyrene	n/a	n/a	0.049
Zinc	90	81	n/a

➤ OEHHA guideline value for fish tissue

Total PCBs Fish Tissue Target	3.6 ug/kg ww
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Linkage Analysis and TMDL Calculation

- LSPC Watershed Model - Links Sources to the Receiving Water
- EFDC Receiving Water Model - Simulates Assimilative Capacity of Receiving Water

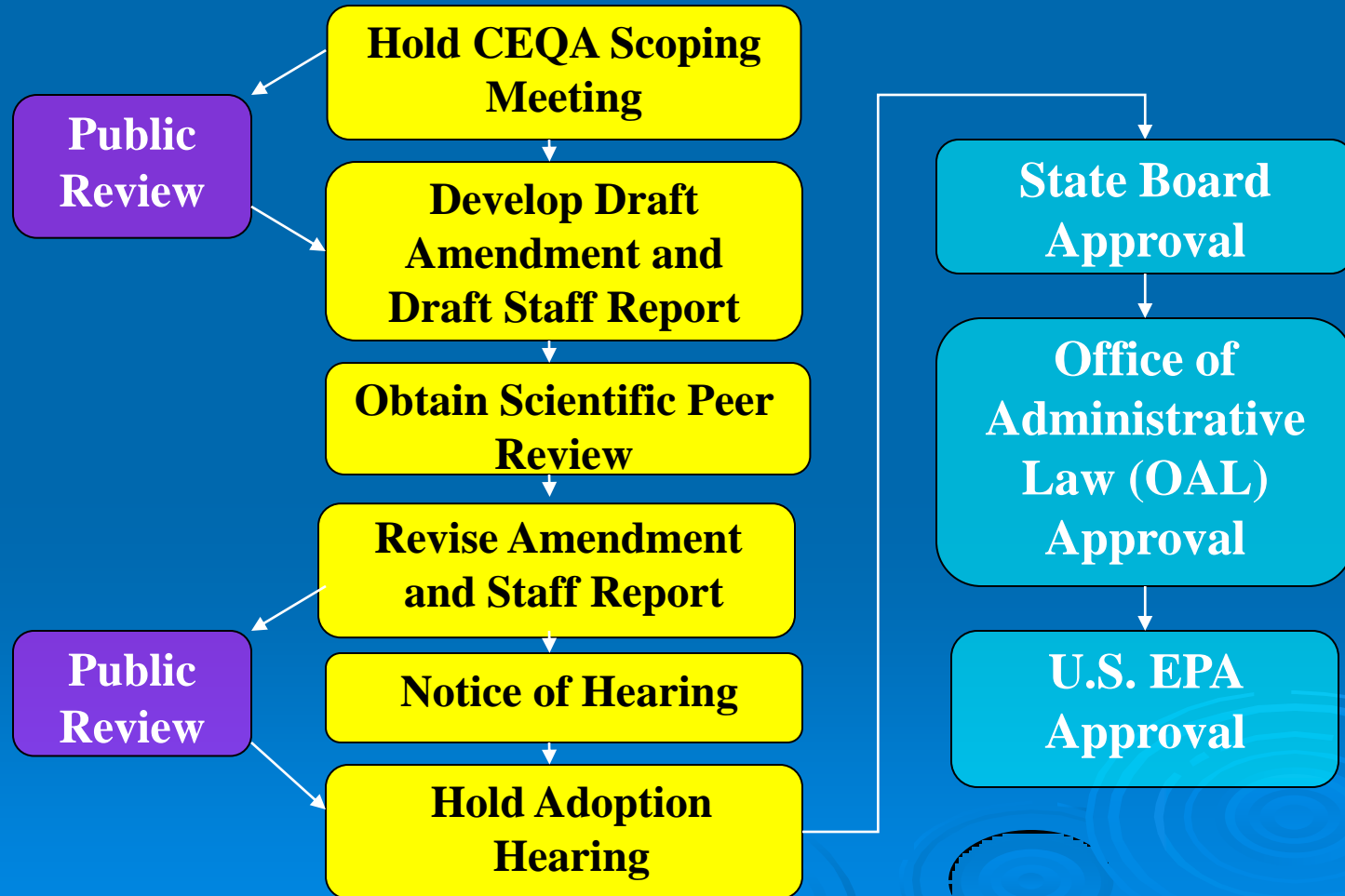
Margin of Safety and Critical Conditions

- Implicit MOS is included by use of conservative assumptions
- Wettest years and highest loading seasons

Implementation Plan

- In addition to **technical TMDL**, a TMDL also includes **Implementation Plan**
 - Measures and strategies to attain TMDL
 - Who does what
 - Water Board - regulatory measures
 - Incorporate requirements into permits or other regulatory orders
 - Responsible party - control discharges
 - Load Reduction Plan
 - Methods of compliance (BMPs)
 - Sediment remediation of legacy pollutants in the Bay
 - Monitoring & reporting
 - When
 - Compliance schedule - timelines and milestones

Overview of Basin Planning Process



DAB Project History

- May 15, 2002 – 1st project meeting (Water Board, Port, City)
- April 21, 2003 – 1st public workshop/CEQA Scoping meeting
- March 2004 – UC Davis Phase I Report (verification)
- April 2005 – UC Davis Phase II Report (TIE)
- 2008 – Tetra Tech model run for CPS and DAB watersheds
 - funded by US EPA
 - Non-site-specific data
- 2009 – City effort (site-specific data)
 - re-ran model using site-specific data
 - more accurate results

DAB Project Status

- Need to re-run model due to
 - Revised numeric targets
 - Revised footprint at Downtown Anchorage
- Piggyback with CPS project
 - Same watershed and receiving water models
 - Same NTs for PAHs, PCBs and Chlordane
 - Same assumptions and approach
 - Scientific peer review done
 - CPS to be adopted soon

DAB Project Timelines

- April - May 2013 –
 - Complete Draft TMDL Staff Report for Public Review
- May - June 2013 –
 - Address public comments
- June - July 2013
 - Finalize TMDL Staff Report and Basin Plan Amendment for public review
- August - September 2013
 - Regional Board hearing

Water Board Staff Contact Information

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